DAC
JPW

TRANSMITTAL LETTER (General - Patent Pending)	Docket No. 115426-949

In Re Application Of: **David Kloper**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/016,845	December 14, 2001	S. Hom	29158	2666	7445

Title:
INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Statement with Petition for Revival (2 pages); Copy of Previously Submitted Postcard; Copy of Cancelled Check; Copy of Previously Submitted Petition for Revival (2 pages); Copy of Previously Submitted Amendment (9 pages); and Return Receipt Postcard.

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 02-1818 as described below.
  - ☐ Charge the amount of
  - ☐ Credit any overpayment.
  - ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Mark D. Pratt
Signature

Dated: July 5, 2006

Mark D. Pratt
Reg. No. 45,794
Customer No. 29158

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on July 5, 2006
(Date)

Signature of Person Mailing Correspondence

Heather Foster
Typed or Printed Name of Person Mailing Correspondence

cc:

P16A/REV03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	David Kloper
Appl. No.:	10/016,845
Conf. No.:	7445
Filed:	December 14, 2001
Title:	INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM
Art Unit:	2666
Examiner:	Hom, Shick C.
Docket No.:	PD-200372 (115426-949)

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

STATEMENT WITH PETITION FOR REVIVAL

The Applicant respectfully requests prompt consideration of the previously filed Petition For Revival and 1.116 Amendment for the above-identified application. As indicated by the attached stamped postcard and processed check of 1,500, a Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 C.F.R. §1.137(b) and Amendment Pursuant To 37 C.F.R. §1.116 were filed on June 2, 2006. The Petition For Revival was filed to revive the application, which was abandoned unintentionally due to a docketing error. The Amendment was filed to *prima facie* place the application in condition for allowance.

The Applicant's representative recently contacted the Office of Petitions regarding the status of the application and was told that the Office of Petitions had no record of the above filing. Accordingly, the Applicant herein attaches copies of the Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 C.F.R. §1.137(b), the Amendment Pursuant To 37 C.F.R. §1.116, the stamped postcard and the processed check of 1,500.00, as evidence of the original filing on June 2, 2006.

In light of the above, the Applicant respectfully requests that the previously submitted Petition For Revival and Amendment be considered, and a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction

is made, please indicate the attorney docket no. PD-200372 (0115426-949) on the account statement.

Respectfully submitted,

BY 

Mark D. Pratt
Reg. No. 45,794
Customer No.: 29158
202-955-7003

Dated: 6/29/06

In re Patent Application of: David Kloper

INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM

Docket No. PD-200372 (115426-949)

On the date stamped hereon the U. S. Patent & Trademark Office hereby acknowledges receipt of the following:

1. Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b)

2. Amendment Pursuant To 37 CFR 1.116

3. Check in the amount of $1,500.00

Mailed First Class by MDP on June 2, 2006

Account Number	Check Number	Amount	Posted (Paid) Date
5800036328	28334	$1,500.00	06/09/2006

BELL, BOYD & LLOYD LLC
PATENTS & TRADEMARKS ACCOUNT
THREE FIRST NATIONAL PLAZA
70 W. MADISON ST., STE. 3300 PH. 312-372-1121
CHICAGO, IL 60602

LASALLE BANK, N.A.
CHICAGO, ILLINOIS 60603

2-50
710

[redacted]

CHECK DATE	CONTROL NUMBER	CHECK AMOUNT
06/02/06	28334	******1,500.00

PAY

ONE THOUSAND FIVE HUNDRED AND 00/100 DOLLARS

TO THE ORDER OF The Honorable Commissioner of Patents and Trademarks

BELL, BOYD & LLOYD LLC
PATENTS & TRADEMARKS ACCOUNT

AUTHORIZED SIGNATURE

[redacted]

⑈0000150000⑈

FOR CREDIT TO THE U.S. TREASURY

671006565
06/09/06
0774112860

031200730
WACHOVIA NA
PHILA, PA
0810210427

Doc Code:

PTO/SB/64 (10-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)	Docket Number (Optional) PD-200372 (115426-949)

First named inventor: **David Kloper**

Application No.: **10/016,845** Art Unit: **2666**

Filed: **December 14, 2001** Examiner: **Hom, Shick C.**

Title: **INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM**

Attention: Office of Petitions
Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
FAX: (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus any extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:
(1) Petition fee;
(2) Reply and/or issue fee;
(3) Terminal disclaimer with disclaimer fee –required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
(4) Statement that the entire delay was unintentional.

1. Petition fee

☐ Small entity-fee $ _____ (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.

☒ Other than small entity - fee $ 1,500 (37 CFR 1.17(m))

2. Reply and/or fee

A. The reply and/or fee to the above-noted Office action in the form of 1.116 Amendment (identify type of reply):
☐ has been filed previously on _____.
☒ is enclosed herewith.

B. The issue fee and publication fee (if applicable) of $ _____.
☐ has been paid previously on _____.
☐ is enclosed herewith.

Doc Code:

PTO/SB/64 (10-05)
Approved for use 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

3. Terminal disclaimer with disclaimer fee

☐ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.

☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of $ _____ for a small entity or $ _____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE. The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

Signature	6/2/06 Date
Mark D. Pratt	45,794
Typed or printed name	Registration Number, if applicable
Bell, Boyd & Lloyd, PO Box 1135	202.955.7003
Address	Telephone Number
Chicago, Illinois 60690-1135	
Address	

Enclosures: ☒ Fee Payment

☒ Reply

☐ Terminal Disclaimer Form

☐ Additional sheets containing statements establishing unintentional delay

☒ Other: Director is authorized to charge any add'l fees or credits to Deposit Acct. 02-1818

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

Date	Signature
	Type or printed name of person signing certificate

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	David Kloper
Appl. No.:	10/016,845
Conf. No.:	7445
Filed:	December 14, 2001
Title:	INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM
Art Unit:	2666
Examiner:	Hom, Shick C.
Docket No.:	PD-200372 (115426-949)

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

AMENDMENT PURSUANT TO 37 C.F.R. §1.116

In reply to the final Office Action dated November 29, 2005, please amend the claims as follows:

The Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

The Remarks begin on page 8 of this paper.

This paper is being filed along with a Petition to Revive.

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method for ranging in a radio frequency communications system, the method comprising:

selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme;

transmitting a ranging message according to the selected transmission channel class over a channel; ~~and~~

selectively modifying the transmission channel class based upon characteristics of the channel; and

receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 2 (previously presented): The method according to claim 1, further comprising:

storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message.

Claim 3 (previously presented): The method according to claim 1, wherein the transmitting step and the modifying step are iteratively performed to achieve an improved transmission class.

Claim 4 (previously presented): The method according to claim 1, wherein the modifying step is performed periodically in response to a change in the characteristics of the channel.

Claims 5-6 (canceled)

Claim 7 (previously presented): The method according to claim 1, further comprising:

altering the transmission channel class for load balancing.

Claim 8 (currently amended): A terminal apparatus for supporting ranging over a radio frequency communications system, the apparatus comprising:

a transmit unit that is configured to transmit a ranging message according to a selected transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme over a channel; ~~and~~

means for selectively modifying the transmission channel class based upon characteristics of the channel; and

a receive unit configured to receive request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite that supports bi-directional communication.

Claim 9 (previously presented): The apparatus according to claim 8, further comprising:

memory configured to store parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message.

Claim 10 (previously presented): The apparatus according to claim 8, wherein the transmission rate is increased to a value that is sustainable by the channel.

Claim 11 (previously presented): The apparatus according to claim 8, wherein the transmission rate is periodically modified in response to a change in the characteristics of the channel.

Claims 12-13 (canceled)

Claim 14 (previously presented): The apparatus according to claim 8, wherein the transmission channel class is altered for load balancing.

Claim 15 (currently amended) A computer-readable medium carrying one or more sequences of one or more instructions for ranging in a radio frequency communications system,

the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme;

initiating transmission of a ranging message according to the selected transmission channel class over a channel; ~~and~~

selectively modifying the transmission channel class based upon characteristics of the channel; and

receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 16 (previously presented): A computer-readable medium according to claim 15, wherein the one or more processors further perform the step of:

storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message.

Claim 17 (previously presented): The computer-readable medium according to claim 15, wherein the transmitting step and the modifying step are iteratively performed to achieve an improved transmission class.

Claim 18 (previously presented): The computer-readable medium according to claim 15, wherein the modifying step is performed periodically in response to a change in the characteristics of the channel.

Claims 19-20 (canceled)

Claim 21 (previously presented): The computer-readable medium according to claim 15, wherein the one or more processors further perform the step of:

altering the transmission channel class for load balancing.

Claim 22 (currently amended): A method for ranging in a radio frequency communications system, the method comprising:

receiving a ranging message from a terminal over a channel associated with a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme;

performing ranging measurements corresponding to the message; ~~and~~

outputting a ranging response message based upon the ranging measurements, the ranging response being transmitted to the terminal, the terminal selectively modifying the transmission channel class based upon the ranging response; and

transmitting a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 23 (previously presented): The method according to claim 22, wherein the terminal stores parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the ranging message.

Claim 24 (previously presented): The method according to claim 22, wherein the transmission rate is increased to a value that is sustainable by the channel.

Claim 25 (previously presented): The method according to claim 22, wherein the transmission rate is periodically modified by the terminal in response to a change in the characteristics of the channel.

Claims 26-27 (canceled)

Claim 28 (previously presented): The method according to claim 22, further comprising:

altering the transmission channel class for load balancing.

Claim 29 (currently amended): A computer-readable medium carrying one or more sequences of one or more instructions for ranging in a radio frequency communications system, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

performing ranging measurements corresponding to a ranging message received from a terminal over a channel associated with a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme; ~~and~~

outputting a ranging response message based upon the ranging measurements, the ranging response being transmitted to the terminal, the terminal selectively modifying the transmission channel class based upon the ranging response; and

transmitting a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 30 (previously presented): The computer-readable medium according to claim 29, wherein the terminal stores parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the ranging transmission of the message.

Claim 31 (previously presented): The computer-readable medium according to claim 29, wherein the transmission rate is increased to a value that is sustainable by the channel.

Claim 32 (previously presented): The computer-readable medium according to claim 29, wherein the transmission rate is periodically modified by the terminal in response to a change in the characteristics of the channel.

Claims 33-34 (canceled)

Claim 35 (previously presented): The computer-readable medium according to claim 29, wherein the one or more processors further perform the step of:

altering the transmission channel class for load balancing.

Claim 36 (currently amended): A satellite communications system comprising:

a terminal configured to perform ranging to determine a target transmission rate among a plurality of transmission rates by transmitting a ranging message over a satellite; and

a hub configured to receive the ranging message and to perform ranging measurements corresponding to the message, the hub outputting a ranging response message that includes ranging parameters, the ranging response being transmitted to the terminal, and the terminal adapts the target transmission rate based upon the ranging response, wherein the hub instructs the terminal to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, and the satellite supports bi-directional communications.

Claim 37 (previously presented): The system according to claim 36, wherein the terminal includes memory configured to store the ranging parameters, the parameters including at least one of power information and timing information associated with the transmission of the ranging message.

Claim 38 (previously presented): The system according to claim 36, wherein the terminal iteratively transmits the ranging message to determine a maximal transmission rate for the target transmission rate.

Claim 39 (previously presented): The system according to claim 36, wherein the transmission rate is periodically modified in response to a change in the characteristics of the channel.

Claims 40-41 (canceled)

Claim 42 (previously presented): The system according to claim 36, wherein the hub instructs the terminal to modify the target transmission rate to perform load balancing.

on:

REMARKS

This Amendment is submitted in reply to the final Office Action mailed on November 29, 2005, issued in connection with the above-identified application. Claims 1-42 are pending in this application. Independent claims 1, 8, 15, 22, 29 and 36 have been amended, and dependent claims 5-6, 12-13, 19-20, 26-27, 33-34 and 40-41 have been canceled. No new matter has been added as a result of the changes made to the application, thus, reconsideration is respectfully requested. This Amendment is filed along with a Petition to Revive and the changes proposed herein *prima facie* place the application in condition for allowance.

I. Examiner Interview

An interview was conducted with Examiner Hom on June 1, 2006, regarding amendments to the claims, which would place the application in condition for allowance. It was agreed that the application would be allowable if independent claims 1, 8, 15, 22, 29 and 36 were amended to include the allowable subject matter of dependent claims 6, 13, 20, 27, 34 and 41.

II. Allowable Subject Matter

The Examiner deemed claims 6, 13, 20, 27, 34 and 41 allowable if rewritten in independent form to include all the limitations of their base claims and any intervening claims. Accordingly, the Applicant has herein amended the claims as suggested by the Examiner. In particular, independent claim 1 has been rewritten to include the combination of claims 1/5/6; independent claim 8 has been rewritten to include the combination of claims 8/12/13; independent claim 15 has been rewritten to include the combination of claims 15/19/20; independent claim 22 has been rewritten to include the combination of claims 22/26/27; independent claim 29 has been rewritten to include the claims combination of claims 29/33/34; and claim 36 has been rewritten to include the claim combination of claims 36/40/41.

III. Response To Claim Rejections

Claims 1, 3-4, 8, 11, 15, 17-18, 22, 25, 29, 32, 36 and 38-39 stand rejected under 35 U.S.C. §102(e) as being anticipated by Prismantas et al. (U.S. Patent Application No. 2002/0155811, hereafter "Prismantas"). Claims 5, 10, 12, 19, 24, 26, 31, 33 and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Prismantas in view of Enns et al. (U.S. Patent Application No. 2003/0161263, hereafter "Enns"). Claims 2, 7, 9, 14, 16, 21, 23,

28, 30, 35, 37 and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Prismantas in view of Parmenter (U.S. Patent No. 6,615,052, hereafter "Parmenter").

As noted above, independent claims 1, 8, 15, 22, 29 and 36 have been amended to include the allowable subject matter of dependent claims 6, 13, 20, 27, 34 and 41. As amended, independent claims 1, 8, 15, 22, 29 and 36 are now clearly distinguishable over the cited prior. Additionally, dependent claims 1-4, 7, 9-11, 14, 16-18, 21, 23-25, 28, 30-32, 35, 37-39 and 42 are clearly distinguishable over the cited prior art based on their dependency from independent claims 1, 8, 15, 22, 29 and 36.

IV. Conclusion

In light of the above, the Applicant respectfully submits that all the pending claims are both novel and non-obvious over the prior art of record. The Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket no. PD-200372 (0115426-949) on the account statement.

Respectfully submitted,

BY 

Mark D. Pratt
Reg. No. 45,794
Customer No.: 29158

Dated: 06/02/06